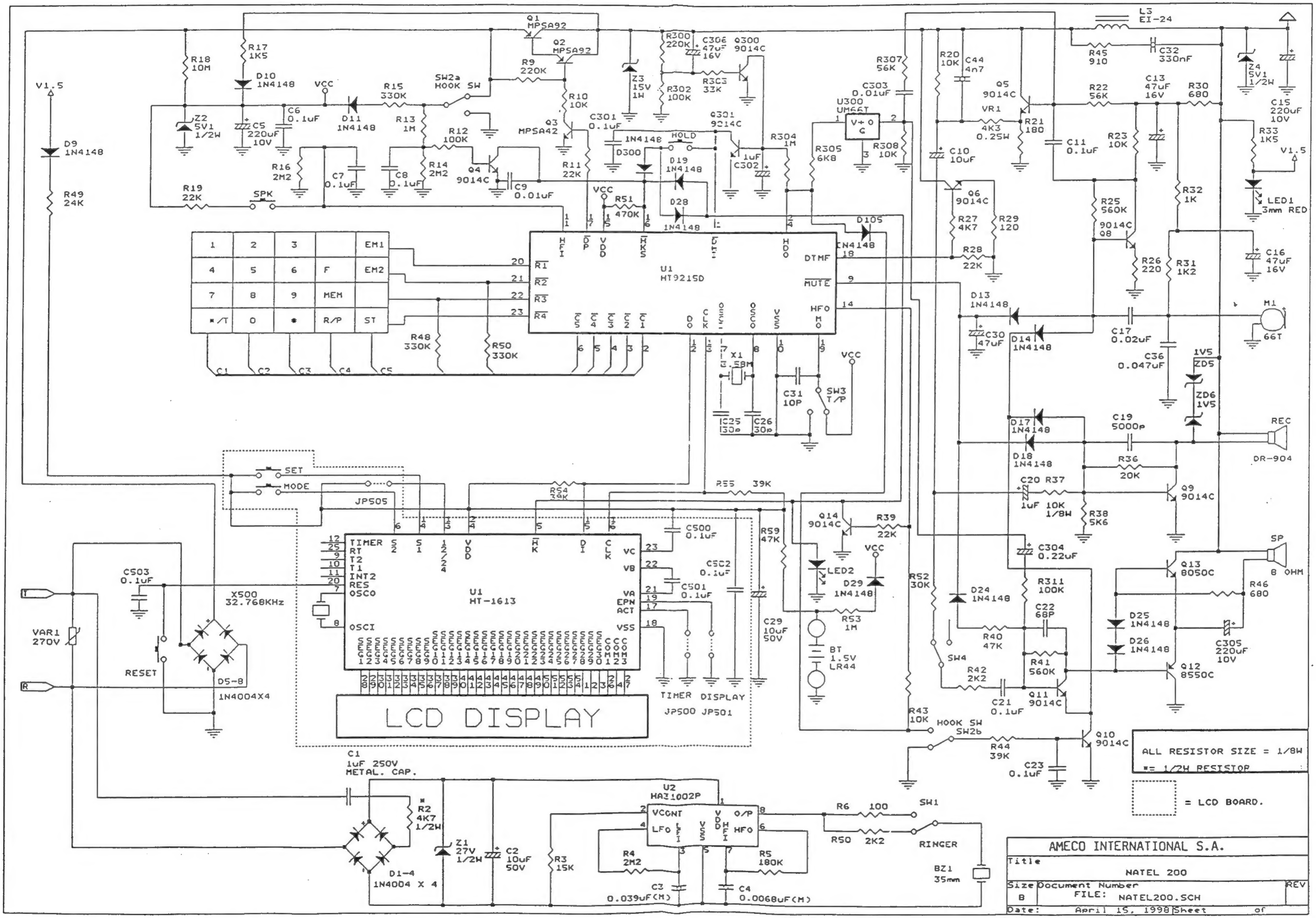
V1.5
D9 1N4148
R49 24K
R18 10M
R17 1K5
D10 1N4148
VCC
R15 330K
SW2a HOOK SW
Q1 MPSA92
Q2 MPSA92
R9 220K
R10 10K
Z3 15V 1W
R300 220K
C306 47uF 16V
Q300 9014C
R303 33K
R302 100K
C301 0.1uF
Q301 9014C
R304 1M
R307 56K
C303 0.01uF
U300 UM66T
R305 6K8
R308 10K
Z2 5V1 1/2W
C5 220uF 10V
C6 0.1uF
D11 1N4148
R13 1M
R12 100K
Q3 MPSA42
R11 22K
R16 2M2
C7 0.1uF
C8 0.1uF
R14 2M2
Q4 9014C
C9 0.01uF
R19 22K
SPK
D300 1N4148
HOLD
D19 1N4148
1uF C302
D28 1N4148
VCC
R51 470K
D105 1N4148
1 2 3 EM1
4 5 6 F EM2
7 8 9 MEM
*/T 0 * R/P ST
R48 330K
R50 330K
U1 HT9215D
DTMF
MUTE
HFO
R1 R2 R3 R4
C1 C2 C3 C4 C5
X1 3.58M
C25 30p
C26 30p
C31 10P
SW3 T/P
VCC
L3 EI-24
R45 910
C32 330nF
Z4 5V1 1/2W
C15 220uF 10V
R20 10K
C44 4n7
Q5 9014C
VR1 4K3 0.25W
R21 180
R22 56K
C13 47uF 16V
R30 680
C11 0.1uF
R23 10K
R33 1K5
V1.5
LED1 3mm RED
C10 10uF
Q6 9014C
R27 4K7
R29 120
R28 22K
R25 560K
9014C Q8
R32 1K
R26 220
R31 1K2
C16 47uF 16V
D13 1N4148
C30 47uF
D14 1N4148
C17 0.02uF
M1 66T
C36 0.047uF
1V5 ZD5
ZD6 1V5
D17 1N4148
C19 5000p
REC
D18 1N4148
R36 20K
DR-904
C20 R37 1uF 10K 1/8W
R38 5K6
Q9 9014C
SET
MODE
JP505
RS4 39K
R55 39K
Q14 9014C
R39 22K
VCC
SP
8 OHM
C304 0.22uF
LED2
D29 1N4148
R53 1M
BT 1.5V LR44
RS2 30K
D24 1N4148
R311 100K
C22 68P
Q13 8050C
R46 680
D25 1N4148
D26 1N4148
C305 220uF 10V
R40 47K
SW4
R42 2K2
R41 560K
C21 0.1uF
Q11 9014C
Q12 8550C
R43 10K
HOOK SW SW2b
R44 39K
Q10 9014C
C23 0.1uF
ALL RESISTOR SIZE = 1/8W
*= 1/2W RESISTOR
= LCD BOARD.
C503 0.1uF
X500 32.768KHz
VAR1 270V
RESET
DS-8
1N4004X4
U1 HT-1613
TIMER RT T2 T1 INT2 RES OSCO OSCI
VC VB VA EPN ACT VSS
C500 0.1uF
C502 0.1uF
C501 0.1uF
C29 10uF 50V
R59 47K
TIMER DISPLAY
JP500 JP501
LCD DISPLAY
C1 1uF 250V METAL. CAP.
R2 4K7 1/2W
D1-4 1N4004 X 4
Z1 27V 1/2W
C2 10uF 50V
U2 HA31002P
VCONT LFO O/P HFO
R3 15K
R4 2M2
C3 0.039uF(M)
C4 0.0068uF(M)
R5 180K
R6 100
RS0 2K2
SW1
RINGER
BZ1 35mm
AMECO INTERNATIONAL S.A.
Title NATEL 200
Size B
Document Number FILE: NATEL200.SCH
REV
Date: April 15, 1998
Sheet of